The Salton Sea After the Water Diversion Begins: Crucial Technical Needs to Enable Air Quality Impact and Mitigation Assessment

As the Salton Sea shrinks, increasing square miles of sea bed will be exposed and subject to wind erosion. Dust storms, and their related PM10 (small particulate matter less than 10 microns in diameter), arising from the exposed sea bed could significantly impact the health and welfare of the people of the Coachella Valley. This is similar to the situation that resulted from the draining of Owens Lake; Owens Valley is subject to PM10 levels orders of magnitudes greater than federal health standards during wind-driven dust storms. SCAQMD staff believes that the same type of technical program of air quality impact and mitigation assessment done in the Owens Valley is crucial to minimizing the public health & welfare impacts to air quality (from Salton Sea water diversion) in the most cost-effective manner. Under the purview of current scientific and technical peer review organizations, SCAQMD staff recommend the following technical projects:

 At least 3 air quality monitoring stations in the communities between the northern shore of the Salton Sea and the SCAQMD's current Indio monitoring station.

Necessity: There are no current air monitoring stations in this growing area of the Coachella Valley nearest to the Salton Sea. Much of this area is tribal land. The people of the communities in this area are predominantly lower-income minority populations. Without these monitors, the air quality impact of PM10 from the Salton Sea in terms of the federal health standards cannot be assessed.

2. Sufficient "Sensit_{TM}" sand movement monitors to assess the PM10 emissivity of exposed sea bed. As in the Owens Valley, only certain areas of the exposed sea bed may significantly emit PM10.

Necessity: The location and extent of those areas most susceptible to wind erosion is necessary to calculate emissions and conduct air quality modeling. Identifying only those sub-areas responsible for significant air emissions is necessary to maximize emission reductions for the least cost.

3. Mitigation assessment projects for proposed controls such as shallow flooding, salt-tolerant vegetation, and sand fencing. As in the Owens Valley, the most cost-effective control program may be a targeted mix of controls.

Necessity: These projects are necessary to minimize the cost of needed controls by providing crucial technical feasibility, durability, emission reduction and cost data.

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